

What is claimed is:

1. A vehicle suspension system, comprising:

a damping device having first and second opposite portions moveable in opposite directions toward and away from one another, said damping device having the first portion adapted to be coupled to a motor vehicle frame and the second portion adapted to be coupled to a motor vehicle wheel mount structure, said damping device being adapted to dampen movement of said portions toward or away from one another; and

first and second magnetic structures connected to said first portion and said second portion, respectively, said first and second magnetic structures having like magnetic poles opposing one another to create a resilient magnetic bias to repel said first and second portions during a relative movement of said portions toward one another.
2. The vehicle suspension system of claim 1, further comprising an outer structure adapted to receive and contain said damping device and said first and second magnetic structures.
3. The vehicle suspension system of claim 2, wherein an interior surface of said outer structure is positioned in sliding engagement with outer surfaces of said first and second magnetic structures.
4. The vehicle suspension system of claim 3, wherein the interior surface of said outer structure is positioned in sliding engagement with the outer surfaces of said first and second magnetic structures so as to form a fluid-tight seal between said outer structure and said magnetic structures.
5. The vehicle suspension system of claim 4, further comprising a pressurized gas disposed within the suspension system.

6. The vehicle suspension system of claim 5, wherein the pressurized gas is disposed within a cavity having cavity walls defined by said first and second magnetic structures and said outer structure.
7. The vehicle suspension system of claim 5, wherein the pressurized gas resiliently biases said first and second magnetic structures away from one another.
8. The vehicle suspension system of claim 2, wherein said outer structure further comprises shock-absorbing boots on end portions thereof.
9. The vehicle suspension system of claim 1, wherein said damping device comprises a shock absorber.
10. The vehicle suspension system of claim 1, wherein said damping device comprises a strut.
11. The vehicle suspension system of claim 1, wherein said first and second magnetic structures are disposed on exterior surfaces of said first and second opposite portions, respectively.
12. The vehicle suspension system of claim 1, wherein said first and second magnetic structures are provided with apertures extending through portions thereof; and
wherein said first and second opposite portions are received in the apertures of said first and second magnetic structures, respectively.
13. The vehicle suspension system of claim 11, wherein said first and second magnetic structures comprise first and second corresponding pluralities of individual magnets.
14. A suspension device, comprising:

a damping device having first and second opposite portions moveable in opposite directions toward and away from one another, said damping device having the first portion adapted to be coupled to a motor vehicle frame and the second portion adapted to be coupled to a motor vehicle wheel mount structure, said damping device being adapted to dampen movement of said portions toward and away from each other;

a first magnetic structure, said first magnetic structure having an aperture provided through a portion thereof, the aperture receiving the first portion of said damping device so as to connect the first portion of said damping device and said first magnetic structure;

a second magnetic structure, said second magnetic structure having an aperture provided through a portion thereof, the aperture receiving the second portion of said damping device so as to connect the second portion of said damping device and said second magnetic structure;

wherein said first and second magnetic structures are arranged on the first and second opposite portions with like magnetic poles opposing one another to create a resilient magnetic bias to repel the first and second portions of said damping device during a relative movement of said portions toward one another.

15. The suspension device of claim 14, wherein said damping device comprises a shock absorber.

16. The suspension device of claim 14, wherein said damping device comprises a strut.

17. The suspension device of claim 14, further comprising an outer structure adapted to receive and contain said damping device and said first and second magnetic structures.

18. The suspension device of claim 17, wherein an interior surface of said outer structure is positioned in sliding engagement with outer surfaces of said first and second magnetic structures.

19. The suspension device of claim 18, wherein the interior surface of said outer structure is positioned in sliding engagement with the outer surfaces of said first and second magnetic structures so as to form a fluid-tight seal between said outer structure and said magnetic structures.

20. The vehicle suspension system of claim 19, further comprising a pressurized gas disposed within a cavity having cavity walls defined by said first and second magnetic structures and said outer structure.